

Serial No. 10/734,085  
60246-259; 10812

AMENDMENT

IN THE CLAIMS:

Please amend the claims as follows:

1. (CURRENTLY AMENDED) An expander assembly for a vapor compression system comprising:  
a first member movable responsive to flow of a refrigerant; and  
a friction device driven by said member for generating heat, wherein said expander assembly controls expansion of a refrigerant between high and low pressure portions of said vapor compression system.
2. (ORIGINAL) The assembly of claim 1, wherein said first member comprises a bladed member attached to a shaft, said bladed member rotatable responsive to flow of a refrigerant.
3. (ORIGINAL) The assembly as recited in claim 1, wherein said first member comprises a piston movable within a cylinder in response to flow of the refrigerant.
4. (ORIGINAL) The assembly as recited in claim 1, wherein said first member comprises a shaft having a vane portion rotatable responsive to flow of refrigerant.
5. (ORIGINAL) The assembly of claim 1, wherein said friction device comprises a heat transfer surface.
6. (ORIGINAL) The assembly of claim 5, wherein said heat transfer surface performs heat exchange with water.

Serial No. 10/734,085  
60246-259; 10812

7. (CURRENTLY AMENDED) An expander assembly for a vapor compression system comprising:

- a first member movable responsive to flow of a refrigerant; and
- a friction device driven by said member for generating heat, wherein said friction device comprises a friction disk rotatable to develop heat and said heat developed by said friction disk is related to a load placed on said friction disk; and  
a load-generating device for controlling said load on said friction disk.

8-9. (CANCELLED)

10. (CURRENTLY AMENDED) The assembly of ~~claim 8~~claim 7, wherein said load generating device varies a load placed on said friction disk for controlling expansion of said refrigerant.

11. (CANCELLED)

12. (ORIGINAL) A heat pump water heater assembly comprising:  
an expander for controlling expansion of a refrigerant; and  
a friction device driven by said refrigerant within said expander for generating heat.

13. (ORIGINAL) The assembly of claim 12, wherein said expander comprises a rotatable member rotatable responsive to flow of a refrigerant.

14. (ORIGINAL) The assembly of claim 12, wherein said friction device comprises a heat transfer surface.

15. (ORIGINAL) The assembly of claim 14, wherein said heat transfer surface performs heat exchange with water.

Serial No. 10/734,085  
60246-259; 10812

16. (ORIGINAL) The assembly of claim 15, wherein said heat transfer surface is adjacent water within a water circuit and transfers heat to water.
17. (PREVIOUSLY PRESENTED) A heat pump water heater assembly comprising:  
an expander for controlling expansion of a refrigerant; and  
a friction device driven by said refrigerant within said expander for generating heat ,  
wherein said friction device comprises a friction disk rotatable to develop heat.
18. (ORIGINAL) The assembly of claim 17, wherein said heat developed by said friction disk is controlled by a load placed on said friction disk.
19. (ORIGINAL) The assembly of claim 18, comprising a load-generating device for controlling said load on said friction disk.
20. (ORIGINAL) The assembly of claim 18, wherein said load generating device varies a load placed on said friction disk for controlling expansion of said refrigerant.
21. (PREVIOUSLY PRESENTED) A heat pump water heater assembly comprising:  
a transcritical vapor compression system;  
an expander for controlling expansion of refrigerant; and  
a friction device driven by said refrigerant within said expander for generating heat.